

## ABSTRACT OF THE DISCLOSURE

This magnetic recording medium is characterized in that in the magnetic recording medium having a magnetic film on a non-magnetic substrate by intercalating at least an under layer, the proportion of functional groups per 100 carbon atoms in a diamond-like carbon protective coating mainly composed of carbon for protecting the magnetic film exceeds 20%.

The bonding force between the protective coating layer and the lubricating layer of the magnetic recording medium is increased so that under high speed rotation, a decrease in the lubricating layer is not caused so as to provide a magnetic recording apparatus having high reliability.